Research Article

The Development of a Learning Medium Using the *Gimkit* Application for A1-Level German Reading Skills

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Abstract: The aim of this study is to develop an interactive learning medium using the *Gimkit* application to enhance students' reading skills at the A1 level. The research follows the ADDIE model (Analysis, Design, Development, Implementation, Evaluation). The data were collected from the *Netzwerk Neu A1* textbook, specifically Chapter 7 titled "*Arbeitsalltag*". Four reading texts were developed into 32 multiple-choice questions and integrated into the *Gimkit* application. Validation by a content expert resulted in a score of 95.8, and validation by a media expert yielded a score of 90 both classified as "very good". The findings show that the Gimkit application is a suitable learning medium to support A1-level reading comprehension by making the learning process more engaging, interactive, and motivating.

Keywords: A1 reading; Arbeitsalltag; development; Gimkit; learning medium.

1. Introduction

In the digital age, learning methods have changed significantly, and many educational institutions are using digital media as learning tools. According to Winkel, learning media are defined as impersonal (non-human) tools used or provided by teachers to teach and convey content, and to play a role in the learning process [9]. At Universitas Negeri Medan, for example, digital applications and platforms are used in the learning process to make it more engaging. Learning media such as videos and educational apps help students learn more flexibly and independently.

In the context of learning German, media plays a vital role, especially in the development of reading skills. Reading at the A1 level in German involves the ability to read, understand, and use simple expressions and sentences. At this level, learners are expected to be able to read and understand short texts such as advertisements or menus, and recognize basic information such as names, dates, and places. Typical activities include reading simple texts, practicing vocabulary, and discussing content. Learning resources can include textbooks, apps, and websites, all aimed at building a solid foundation in German before progressing to the next level.

Reading is essentially a physical and psychological process in the form of visual observation of written text, as well as a mechanical process during reading [2].

When learning to read at the A1 level, students often face challenges due to fundamental differences between the German and Indonesian languages. The new vocabulary that must be memorized is a particular challenge, especially for students who have never studied German before. They may feel confused or lose their motivation to learn. Therefore, it is important to develop learning media to support reading comprehension at the A1 level, especially using the topic "*Arbeitsalltag*". In the textbook *Netzwerk Neu A1*, the theme "*Arbeitsalltag*" deals with daily work activities in the context of the German language. This chapter is designed to help learners understand their work routines in German and communicate effectively.

Key aspects of this theme include understanding and writing texts related to work processes, acquiring conversational skills for professional environments, giving information about locations, describing work tasks, and understanding and responding to official

communications. Furthermore, learners are introduced to the concept of small talk, which is commonly used in the workplace to build good social relationships with colleagues.

To support the learning process, the book provides various interactive exercises and audiovisual materials accessible online, allowing learners to train their listening comprehension and better understand the cultural context of work life in German-speaking countries. By working with this theme, learners are expected to improve their professional language skills and gain more confidence in interacting within German-speaking work environments.

One solution to the challenges in learning to read at the A1 level is the development of reading media using the *Gimkit* application. *Gimkit* is a game-based learning application that allows teachers to create interactive quizzes for students to learn through play. The app offers various quiz formats, including word writing, multiple choice, and flashcards. With *Gimkit*, students can learn German playfully, which is intended to increase both their interest in and understanding of A1-level content. This approach aims to make the teaching and learning process more efficient and enjoyable. The application also enables teachers to track students' progress, allowing them to tailor instruction to individual learning needs.

Although *Gimkit* offers many advantages, there are also some drawbacks. The limited content and dependence on a strong internet connection can be problematic. Moreover, the competitive format may cause anxiety in some students, and the available time might not be sufficient to explore all material in depth. Understanding these advantages and limitations allows teachers to maximize *Gimkit*'s potential to support German reading instruction at the A1 level.

This study examines the process and results of developing learning media for Lesen A1 using the *Gimkit* application, with a focus on how the application can improve reading comprehension with the theme "*Arbeitsalltag*." The investigation centers on the development of A1-level reading media through *Gimkit* based on the "*Arbeitsalltag*" theme. The subject of this study is Lesen A1, a German language skill course at Universitas Negeri Medan. The media development design includes up to 32 multiple-choice questions based on the "*Arbeitsalltag*" topic from the *Netzwerk Neu A1* textbook.

Based on the results of questionnaires completed by 27 third-semester students from the 2023 cohort, it was found that 66.7% of respondents experienced difficulties in mastering A1 reading skills, and 96.3% indicated that they needed supportive learning media. Analysis of the responses suggests that the main issues in understanding A1 texts stem from limited vocabulary and a lack of reading practice. In addition, a lack of self-confidence was identified as an added challenge that impedes the learning process. Regarding the topic "*Arbeitsalltag*," students reported similar difficulties, particularly related to acquiring new vocabulary and understanding sentence context.

To address these challenges, the respondents expressed a desire for interactive and varied learning media, such as digital quiz applications, which could make learning more engaging and effective. Furthermore, media that offers a variety of exercises was seen as helpful, as it allows for deeper engagement with the content and facilitates the learning process. This study uses the ADDIE model (Analysis, Design, Development, Implementation, & Evaluation) [4]. It is hoped that this study will be useful for students and language learners in mastering A1-level reading, particularly with the theme "*Arbeitsalltag*."

2. Literature Review

The development of instructional media plays an important role in supporting the achievement of effective and engaging learning objectives. States that instructional media is anything that can be used to deliver messages and stimulate students' attention, interest, and thoughts during the teaching and learning process [3]. In this context, interactive instructional media is especially needed in foreign language learning such as German.

This study adopts the ADDIE development model, which consists of five stages: Analysis, Design, Development, Implementation, and Evaluation. ADDIE is a commonly used model in instructional product development due to its systematic and applicable structure [8]. It is applied in this study as it provides a clear and structured framework for developing technology-based media such as the *Gimkit* application.

Gimkit is an online quiz-based application that supports interactive learning. It was selected because it features live quizzes, individual and team modes, as well as a point and virtual

currency system that boosts student motivation [6]. This research utilizes *Gimkit* as a reading instructional medium for German Language Education students at the A1 level.

The learning materials are adapted from the *Netzwerk Neu A1* textbook, specifically Chapter 7 titled "*Arbeitsalltag.*" This book was chosen as the main source because it aligns with the topics and core competencies of the Lesen A1 course. In developing the media, the researcher transformed four reading texts from the chapter into 32 multiple-choice questions, which were then integrated into the *Gimkit* platform [6].

Relevant previous studies referenced in this research include work [5]), who used *Gimkit* to improve students' achievement in Bahasa Indonesia[1], who demonstrated that *Gimkit* can enhance collaborative learning in pharmacy education [6].

Based on these studies, it can be concluded that the *Gimkit* application has significant potential to be used across various educational fields, including German language instruction, particularly in supporting A1-level reading comprehension.

3. Research Methode

This research is a type of development study aiming to develop a German A1-level reading learning medium using the *Gimkit* application, with the theme *Arbeitsalltag*. The development model used is ADDIE, which consists of five main phases: Analysis, Design, Development, Implementation, and Evaluation.

- Analysis
  In this phase, the researcher identified learning problems in Lesen A1 by distributing a questionnaire to 27 third-semester students of the 2023 cohort. The findings showed that 66.7% of students had difficulty understanding texts due to limited vocabulary and lack of contextual comprehension. Moreover, 96.3% expressed the need for engaging and interactive media. Based on this analysis, the selected learning material came from *Netzwerk Neu A1*, Chapter 7, themed *Arbeitsalltag.*

- Design
  During the design phase, the researcher structured the content, format, and visual layout of the media. A total of 32 multiple-choice questions were created based on four reading texts and uploaded to the *Gimkit* platform. A preliminary test was conducted to assess content clarity and technical functionality.

- Development
  In the development phase, the final quiz contents were completed and integrated into *Gimkit*. Students were trained on how to access and complete the quizzes. Additionally, scannable barcodes were included to explain vocabulary directly within the media.

- Implementation
  The implementation phase was not conducted directly due to time limitations and the study's scope. Instead, the developed media was validated by two experts: one in content and one in media.

- Evaluation
  Evaluation was carried out to assess the effectiveness and feasibility of the instructional media. The content expert gave a score of 95.8, and the media expert gave 90 both categorized as "very good". Minor revisions were made based on expert suggestions, such as adjusting the quiz interface and refining question content.

3.1. Algorithm/ Pseudocode

To represent the systematic process of instructional media development, the researchers adopted an algorithmic approach based on the ADDIE model. The following algorithm outlines the key steps undertaken in the design, development, and evaluation of a *Webtoon*-based digital comic titled *"Was machst du?"*. Presenting the method in algorithm form facilitates a clearer understanding of the procedural stages involved in this research.

Table 1. Development of *Gimkit*-Based Learning Media for A1 Reading

Algorithm 1. Development of *Gimkit*-Based Learning Media for A1 Reading
INPUT: Student learning needs, Chapter 7 of *Netzwerk Neu A1* ("*Arbeitsalltag*"), reading texts, expert validation
OUTPUT: Validated and functional *Gimkit*-based digital learning media
1:   Identify learning difficulties in A1 reading through a questionnaire distributed to 27 students

2:	Analyze questionnaire results to determine specific learning needs
3:	Select relevant materials from *Netzwerk Neu A1*, Chapter 7: "*Arbeitsalltag*
4:	Extract four reading texts from the chapter
5:	Create 32 multiple-choice questions based on the texts
6:	Design the layout and structure of the quiz in *Gimkit*
7:	Upload all questions to the *Gimkit* platform
8:	Conduct initial technical test of the media
9:	Validate media with a content expert and a media expert
10:	Revise based on expert feedback (adjust interface, refine questions)
11:	Finalize and prepare media for use in instructional settings

4. Results and Discussion

This study produced an interactive digital learning medium developed through the *Gimkit* application, focusing on reading skills in German at the A1 level. The materials used were based on *Netzwerk Neu A1*, particularly Chapter 7, titled "*Arbeitsalltag.*" Four reading texts were selected and converted into 32 multiple-choice questions, which were uploaded to the *Gimkit* platform as a fun and interactive quiz-based medium

4.1 Validation Results

The developed media was validated by two experts: one in content and one in media. The content expert provided a score of 95.8, classified as "very good," covering aspects such as clarity, structure, completeness, attractiveness, ease of understanding, and question difficulty. The media expert rated the media at 90, also in the "very good" category, assessing aspects like display quality, readability, media effectiveness, and the relevance of *Gimkit*'s features.

4.2 Discussion of Findings

The use of the *Gimkit* application proved to effectively address students' difficulties in understanding A1-level German reading texts. Previous questionnaire data showed that 66.7% of students struggled with limited vocabulary and sentence context, while 96.3% expressed a need for more engaging and interactive media. *Gimkit* meets these needs by offering a competitive and repetitive quiz format that indirectly strengthens students' understanding of texts and new vocabulary

Additionally, the integration of barcodes within *Gimkit* enabled students to access word meanings directly, supporting self-directed learning. The combination of visual elements and text provided by *Gimkit* also caters to diverse learning styles, particularly visual and kinesthetic learners. Expert suggestions were addressed, including improving quiz items and reorganizing the quiz display for enhanced appeal.

Overall, the media developed is not only feasible in terms of content and technology but also effective in enhancing motivation and reading comprehension aligning well with the instructional goals of Lesen A1.

5. Comparison with State-of-the-Art

This study shares both similarities and differences with previous research that also developed digital learning media, especially using the *Gimkit* application or other interactive tools.

Developed an interactive learning medium using Canva for Education to enhance German A1 reading skills. While both studies aim to support A1-level reading, their approaches differ. Aruan et al. used Canva to create a visual learning book, whereas this research employed *Gimkit* to offer a game-based quiz platform [2].

Gimkit in teaching literature appreciation to elementary students. Their method was quasi-experimental, unlike this study which applies the ADDIE development model. Moreover, their focus was on literary outcomes, while this study centers on reading comprehension at the A1 level [10].

Explored the benefits of using *Gimkit* and Kahoot in pharmacy education. Although the topic is different, the application of *Gimkit* in diverse disciplines shows its broad potential.

Their research used a comparative method, while this one emphasizes systematic media development[1].

In the realm of other quiz-based applications, developed learning media using Quizizz for A2 grammar lessons. The distinction lies in the application used and the language skill focus (A2 Grammar vs. A1 Reading) [7].

6. Conclusion

The resulting media consists of an interactive quiz with 32 multiple-choice questions based on four reading texts from *Netzwerk Neu A1*, Chapter 7. Content expert validation received a score of 95.8, while media expert validation received 90 both classified as "very good". The addition of barcode features for vocabulary explanation also enhanced accessibility and learner autonomy.

These findings indicate that *Gimkit* can be an effective instructional medium for improving reading skills, learning motivation, and student independence. The implication is that this media can be used by lecturers as a supplementary teaching tool and by students for flexible learning outside the classroom.

However, this study has limitations, particularly the lack of direct classroom implementation due to time constraints. Therefore, future research is recommended to test the media in classroom settings and to expand development efforts to other levels and German language skills.

Reference

[1] Abdullayevna, S,D,. Anvarovna A, D,, & Botirovich ,T,B,. (2024). *The Benefits of Using Gimkit and Kahoot Online Applications to Promote Interactive Learning Among Pharmacy Students.* International Journal of Language Learning and Applied Linguistics, 3(1), 61-67.

[2] Aruan, L., Hafniati, & Dallion, R. (2024). Die Erstellung eines Lernmediums zur Steigerung der deutschen Lesefähigkeit auf dem Niveau A1 basierend auf Canva for Education. Studia: Journal des Deutschprogramms, 13(1), 1–8. https://jurnal.unimed.ac.id/2012/index.php/studia/article/view/55351

[3] Arsyad, Azhar. 2017. Media Pembelajaran. Jakarta: PT. Raja Grafindo Persada.

[4] Bäsler, Sue-Ann., & Sasaki, F.(2020). Interaktive Lernmedien: Gestaltung von digitalen Bildungsmedien mit Künstlicher Intelligenz. Information. Wissenschaft & Praxis, 71(1), 39–42. https://www.degruyter.com/document/doi/10.1515/iwp-2019-2059/html?lang=de&srsltid=AfmBOopCGzWZ2CmzFLJDb4leibNIG7i6FpKsydSI4L3Q7J6sac579sHF

[5] Brillian, I., Budyartati, S., & Yanto, E, N, A. (2024). Pengaruh Penggunaan Media Pembelajaran *Gimkit* sebagai Gamefikasi Terhadap Pembelajaran Bahasa Indonesia di Kelas 5 Sekolah Dasar. Seminar Nasional Sosial Sains, Pendidikan, Humaniora (SENASSDRA), 3(3), 610-618.
https://prosiding.unipma.ac.id/index.php/SENASSDRA/article/view/5982/4827

[6] Purba, D, T., Naibaho, M, S., Hasibuan, N, A., Hutagaol, R, A., Butar Butar, Y, D., & Hutagulung, S, M. (2024). Penggunaan Game Wildschlange sebagai Bahan Ajar Tambahan untuk Meningkatkan Keterampilan Membaca Kelas XI Semester 2 Materi Essen und Trinken sebagai Konten Utama. JICN: Jurnal Intelek dan Cendikiawan Nusantara, 1(3), 3483-3495.
https://jicnusantara.com/index.php/jicn/article/view/402

[7] Purnamasari, L., & Trisno, E. (2022). *An Analysis of Students' Ability in Reading Comprehension by Using Barrett's Taxonomy at English Department Universitas Negeri Padang.* Journal of English Language Teaching, 11(2), 216–231.

[8] Putri, R, M., & Hafniati. (2022). Die Erstellung Eines Interaktiven Lernmediums Mit Der Hilfe "Articulate Storyline 3" Zum Thema "Familiengeschichten". Studia: Journal Des Deutschprogramms. 11(2). 69-81. https://jurnal.unimed.ac.id/2012/index.php/studia/article/view/41449

[9] Sholeh, Muhammad., Rr. Yuliana Rachmawati., und Erma Susanti.(2020). Penggunaan Aplikasi Untuk Membuat Konten Gambar Pada Media Sosial Upaya Mempromosikan Hasil Produk. Jurnal Pengabdian Masyarakat Berkemajuan .4(1).

[10] Yustikadew R., & Saputra, E, R. (2024). *The Effect of Using Gimkit on the Learning Outcomes of Literature Appreciation of Grade V Elementary School Students.* Jurnal Pendidikan Sekolah Dasar, 7(1), 26–31. https://journal.uny.ac.id/index.php/didaktika/article/view/70872